



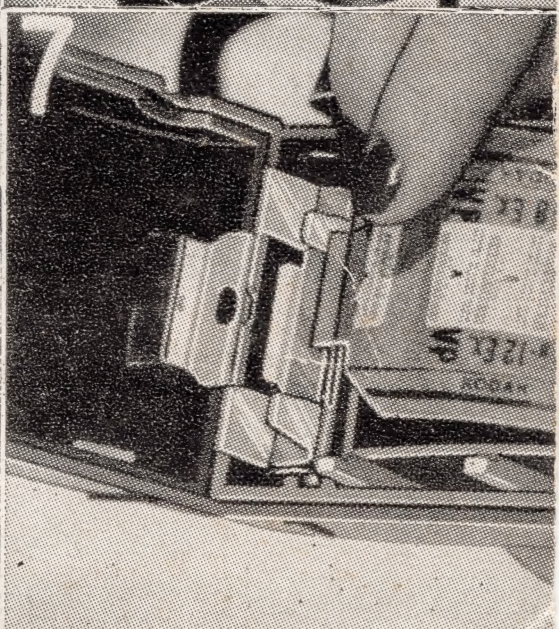
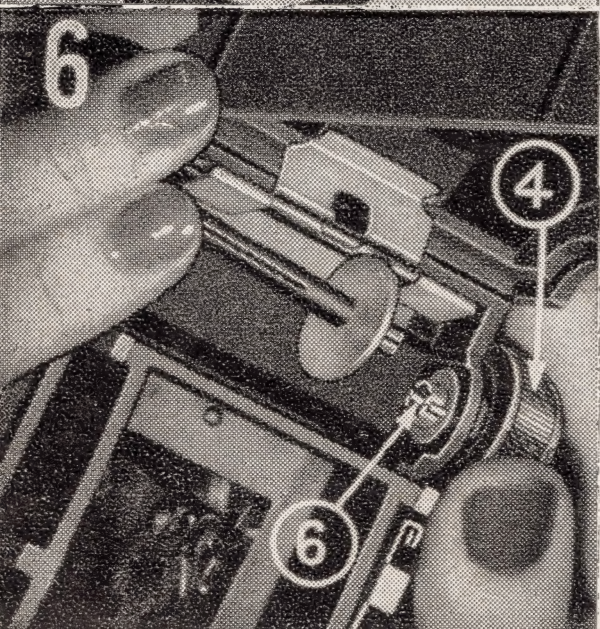
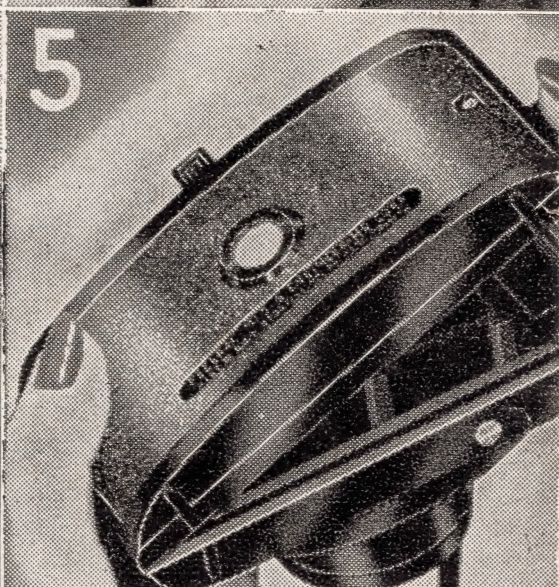
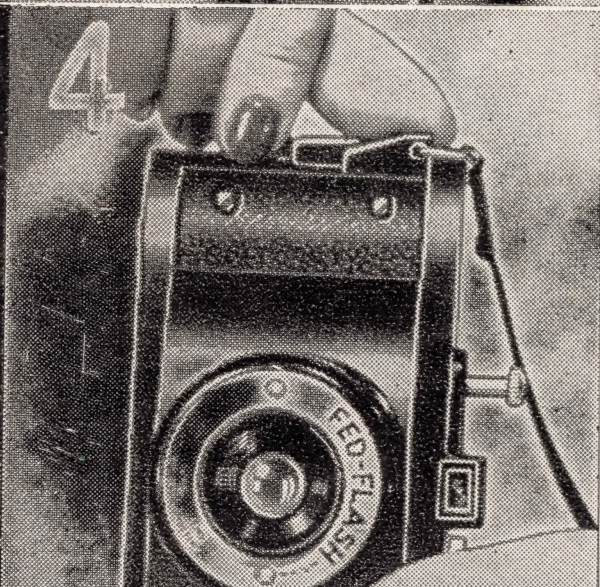
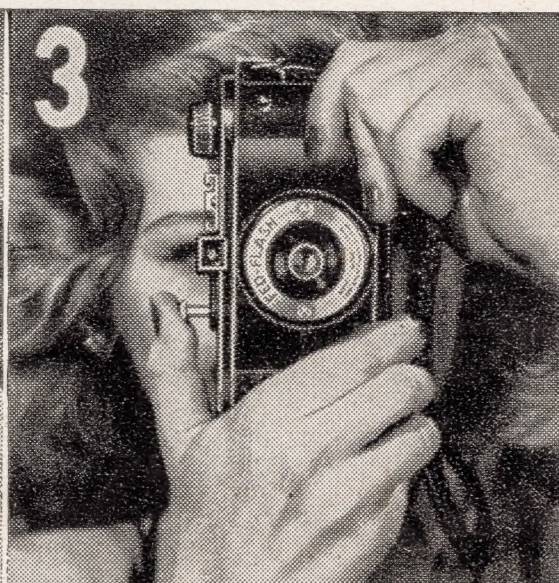
HOW TO OPERATE THE

FEDERAL
FED-FLASH

C A M E R A

Federal Manufacturing & Engineering Corp.
Brooklyn 5, N. Y.

**Your FED-FLASH Camera
is easy and simple to use!**



1. To get good, clear, sharp pictures, this is all you have to do:

Put a roll of film in the camera;

Look through the view finder;

Press the shutter release plunger **SLOWLY** until you hear the shutter click;

Wind the film to the next number.

FOR GOOD PICTURES, BE SURE NOT TO JAR OR MOVE THE CAMERA AT THE INSTANT OF TAKING A PICTURE

When taking a picture —

Hold the camera firmly against your face.
Press down **SLOWLY** on the shutter release plunger until you hear the shutter click.

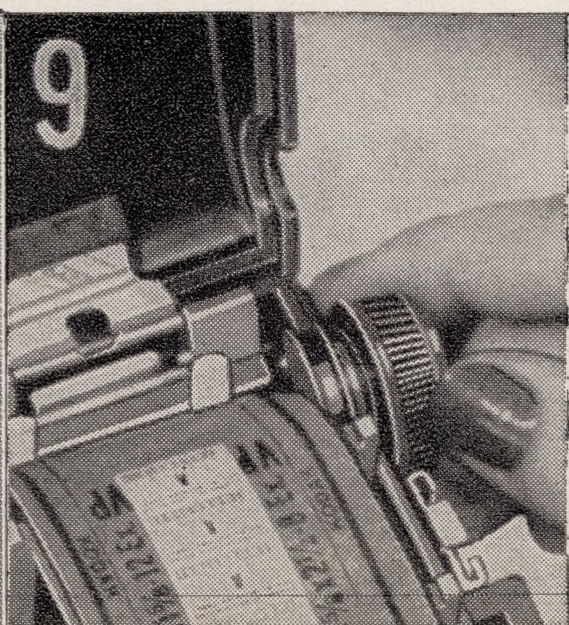
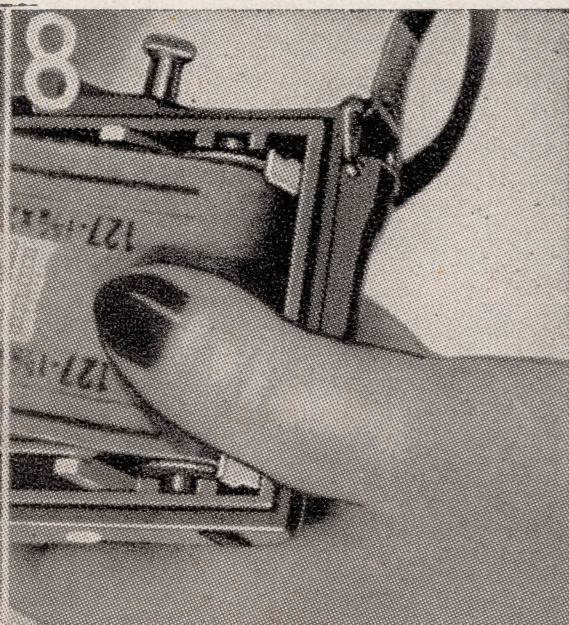
2. The Fed-Flash camera will take outdoor pictures as long as the light is good; and when used in combination with the Federal flash unit (see paragraph 19) which is available as an accessory at a moderate additional price, synchronized flash pictures may be made indoors or outdoors at any hour of the day or night.

BEFORE LOADING

3. It is a good idea not to load your Fed-Flash camera until you have gone through the motions of using it without any film in it. In this way you will quickly accustom yourself to the "feel" and operation of the camera.

THE LENS

4. The lens of the Fed-Flash camera is of the fixed-focus type, and is set so that any object at a distance of



about four feet (about 1.2 meters) and beyond will automatically be in focus. Keeping the lens clean will help you to get clear, bright pictures.

THE VIEW FINDER

5. To use the view finder (2, Fig. 1) hold the camera to your eye and look through the finder (see Figs. 2 and 3). Whatever you see in the finder will be included in the finished picture. When using the finder, you can hold the camera either horizontally, as in Figure 2, or vertically, as in Figure 3.

THE SHUTTER RELEASE PLUNGER

6. The shutter release plunger (1, Fig. 1) has a long stroke, and the shutter is not released until the plunger has been pushed down all the way. Push the plunger down all the way a few times and listen for the click of the shutter. Remember that the picture is not taken until you hear this click.

OPENING THE CAMERA

7. The camera back is opened like the clasp on a hand-bag, with a twisting motion, by pushing against the projecting tab marked "Open" (5, Fig. 1). See Fig. 4.

CLOSING THE CAMERA

8. Close the hinged side first by pressing the edges of the back and the camera together with thumb and fingers, as shown in Figure 5; then snap the opposite end closed. Make sure that the back is securely closed at both ends.

LOADING THE CAMERA

9. The Fed-Flash camera uses standard "vest pocket" size roll film, and makes eight pictures measuring $1\frac{5}{8}$ " x $2\frac{1}{2}$ " (about 4 x 6.5 cm.) on each roll. Kodak (size



127) Ansco (size A8) or any other roll film of standard make and similar size may be used. (For further information regarding the type of film to use, see paragraph 17.)

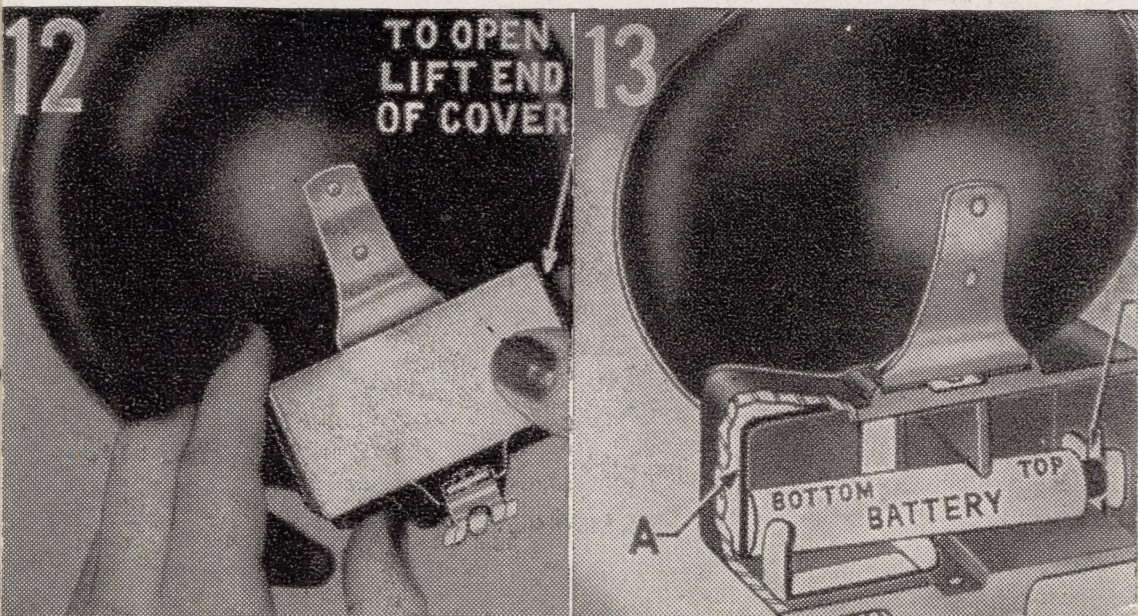
10. The camera should be loaded and unloaded in the shade, or in subdued light.

11. Open the camera, and turn the winding-knob (4, Fig. 6) until the key (6) inside the winding-shaft is in the up and down position. Place the empty take-up spool in the compartment directly under the winding-knob. Engage the winding-shaft key in the slotted end of the spool and center the end of the spool in the hole in the winding-shaft.

12. Remove the seal from the unexposed roll of film. Handling the roll with care to prevent it from unwinding, place it in the other compartment in such a manner that the protecting paper will unwind with the *colored side facing up*, and the black side facing the inside of the camera (see Fig. 7). **CAUTION:** If the roll of film is put in the other way, you will not get any pictures.

13. Keep your left thumb lightly on the roll of film to prevent it from unwinding too fast (see Fig. 8) and draw the protecting paper across the camera to the take-up spool, making sure that the paper is within the projecting guides on either side of the opening in the camera. Thread the end of the paper into the long slot in the take-up spool, and give the winding-knob two complete turns (see Fig. 9). Make sure that the paper is winding up evenly, and not at an angle to the take-up spool, and then close the camera securely at both ends. (Refer to paragraph 8 and Fig. 5).

14. Look through the red window in the back of the camera, and continue to turn the film-winding knob until an indicating hand appears in the window, followed by a



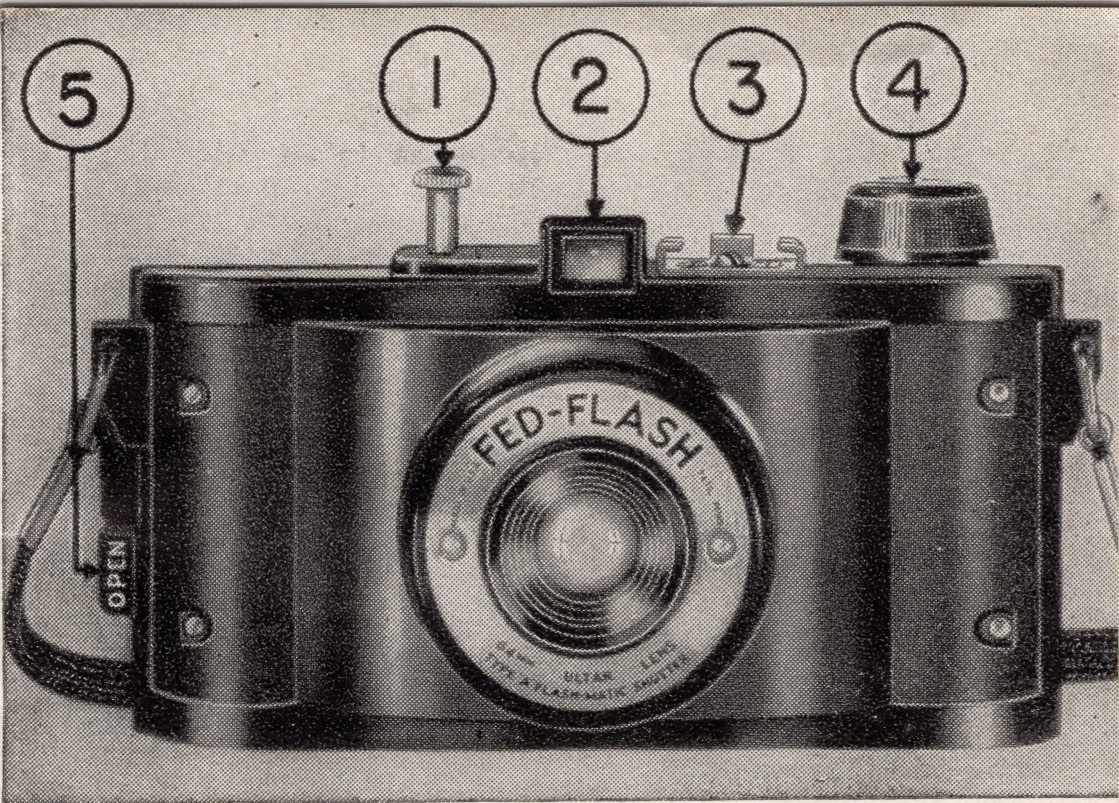
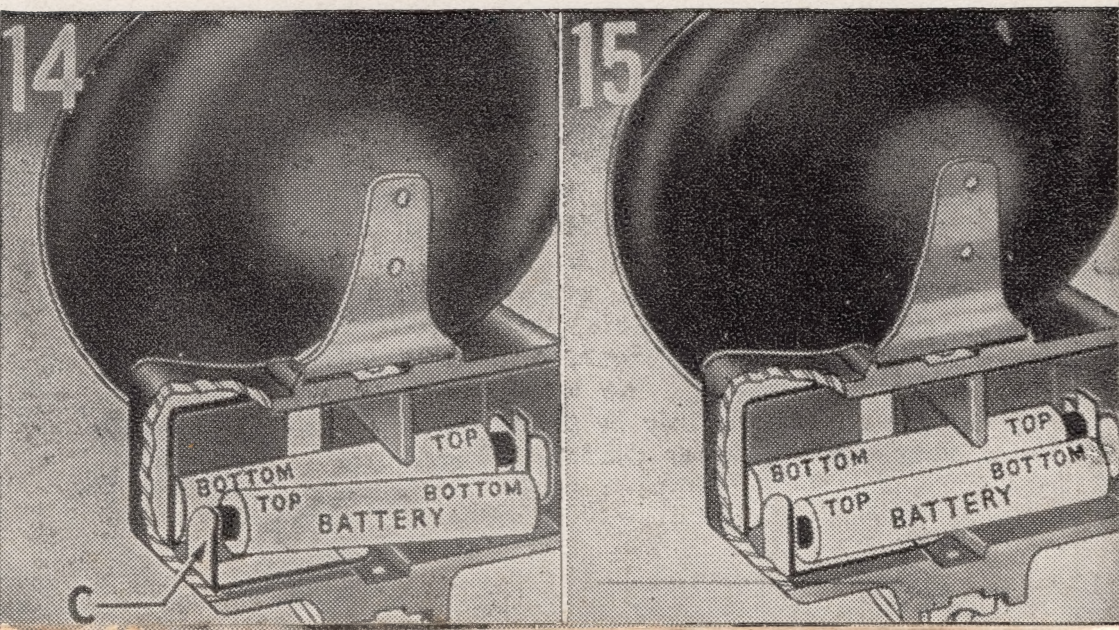


Figure 1

series of dots. At that point, continue to turn the winding-knob very slowly until the numeral "1" appears in the window (see Fig. 10). You are now ready to make the first exposure.

TAKING THE PICTURE

15. When taking a picture, include in the view finder whatever you want in the finished picture, and be careful not to have your finger in front of the lens. *Hold the camera firmly against your face (see Fig. 2) and press the shutter release plunger all the way down with a smooth, SLOW "follow-through" motion until you hear the shutter click. Avoid pushing the plunger down with a quick thrust, as this will jar the camera and result in a blurred picture. As soon as the picture has been made, wind the film to the next number.*



16. After the eighth picture has been taken, wind the film until the end of the protecting paper passes under the red window. Give the film-winding knob several additional turns, to make sure that the roll is completely wound up, and then open the camera back. Remove the exposed roll of film, *being careful to keep it from unwinding or becoming loose*. Fold under the end of the protecting paper, and fasten it with the sticker.

FILM FOR OUTDOOR USE

17. For general outdoor work, Kodak Verichrome or Plus X Panchromatic film, Ansco Plenachrome or Superpan Supreme, or any other roll film of standard make with similar characteristics and equivalent speed, will produce satisfactory results. For pictures on dark days, or in the shade, Kodak Super XX Panchromatic film, Ansco Superpan Press, or similar film may be used. However, the use of such high speed film is not recommended for pictures made in bright sunlight.

LIGHT CONDITIONS

18. While bright, sunny days are best for outdoor work, you can make pictures successfully even when the sky is slightly cloudy or hazy. On clear days, you can make pictures in the open shade.

FLASH PICTURES INDOORS OR OUTDOORS BY NIGHT OR BY DAY

19. The Federal flash unit (Fig. 11) which you can purchase from your dealer, makes it possible to take a photograph by the light of a miniature flash-bulb.

THE BATTERIES

20. The flash unit uses two penlite type batteries. These batteries are not supplied with the unit, but are readily obtainable. They should be as fresh as possible, and should be tested before the unit is put to use (see paragraphs 30 to 35).

21. To insert the batteries in the unit, remove the metal cover plate (see Fig. 12) by lifting up one of the spring-clips which hold it in position on the battery-case. Refer to Figures 13, 14 and 15, and insert the batteries as shown, making certain that the top of each battery lies next to the bottom of the other battery in the manner indicated in the illustrations. Do not attempt to insert either battery by pushing both ends in at once. Insert the rear battery, *bottom end first*, and then push the top end of the battery all the way in. Next, insert the front battery, *top end first*, and then push the bottom end of the battery all the way in. *Make sure that both batteries are held firmly in place by the contact springs*. Then replace the cover plate.

22. Make sure that the contact springs in the battery case, as well as the tops and bottoms of the batteries, are clean. Before loading the camera with film, operate the shutter a few times to insure clean contact points in the shutter. Whenever you have reason to believe that the flash unit will remain out of use for a period of a month or more, remove the batteries to prevent possible corrosion.

ATTACHING THE FLASH UNIT

23. To attach the flash unit, slide the metal foot at the bottom of the unit into the metal shoe on the top of the camera, and push the unit back as far as it will go. (See Fig. 16).

24. **CAUTION:** Make sure that you do not have an unused flash bulb in the unit while the unit is being attached to or removed from the camera, as the flash bulb may go off while the unit is being moved.

INSERTING THE FLASH-BULB

25. The miniature flash bulbs used in the flash unit have bayonet bases. (See paragraph 29 for types of bulbs, and exposure data). After the flash unit has been attached to the camera, insert a flash-bulb by fitting the small projecting lugs on the base of the bulb into the corresponding slots in the socket of the flash unit, pressing the bulb down as far as it will go, and twisting it until it is held securely in place. The camera is now ready for a flash exposure.

26. **CAUTION:** Be careful not to trip the shutter accidentally after the flash-bulb has been inserted in the unit. Be particularly careful to keep your finger off the shutter release plunger while you are holding the camera with the reflector facing you.

TAKING A FLASH PICTURE

27. To make a flash picture, the camera is operated in exactly the manner as for outdoor shots by



ordinary daylight. (See Fig. 17). The camera may be held either vertically or horizontally. However, in order to avoid over exposure due to the intensity of the light, do not come nearer than five feet (about 1.5 meters) to your subject.

REMOVING THE BULB

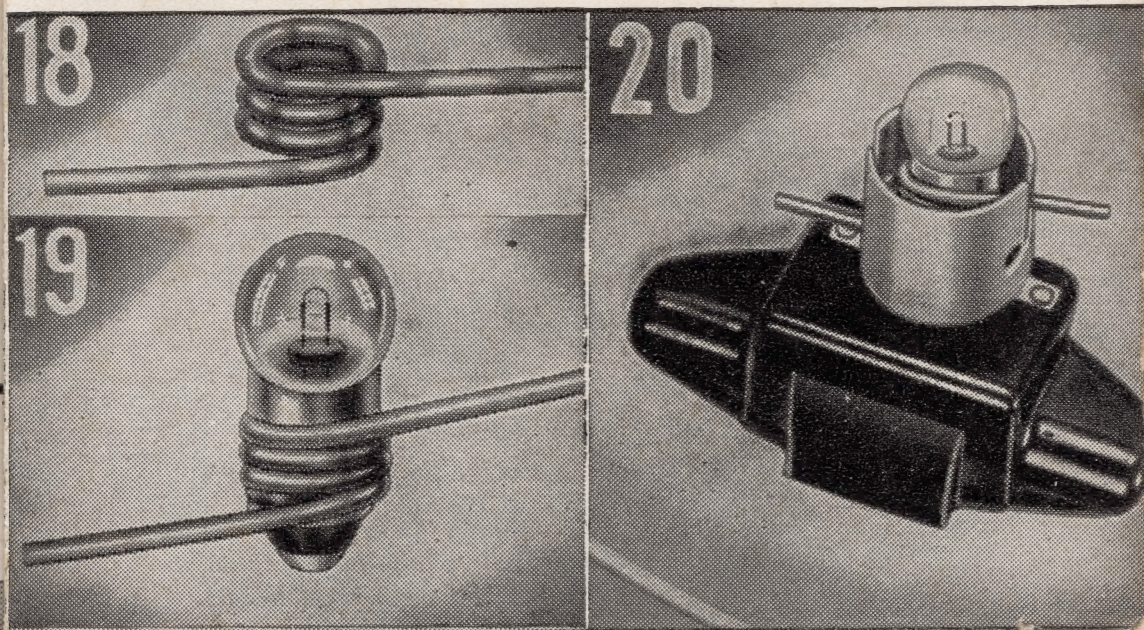
28. After making an exposure, wait about 15 to 30 seconds to allow the flash-bulb to cool, before removing it. Flash-bulbs cannot be used more than once, and must be replaced for each picture.

FLASH EXPOSURE DATA

29. The following table shows you how far to stand from your subject when taking flash pictures under a variety of conditions. The distances given in the table are approximate, and depend upon the amount of light reflected from the walls or other surroundings.

FLASH BULB EXPOSURE CHART

Type of Film	Type of Bulb	Medium Size Room	Large Room or Hall or Out- doors at Night
Verichrome, Plus X Plenachrome, Superpan Supreme, etc.	Wabash SF or G.E. SM	5 to 8 ft.	5 to 6 ft.
	Wabash Press 25 or G.E. No. 5	12 to 15 ft.	9 to 12 ft.
	Wabash SF or G.E. SM	9 to 12 ft.	6 to 9 ft.
Super XX, Superpan Press, etc.	Wabash Press 25 or G.E. No. 5	15 to 20 ft.	12 to 15 ft.



TESTING THE BATTERIES

30. If the batteries are old, or if they have had prolonged use, they may not have sufficient power to set off a flash-bulb. Batteries run down even when not in use. It is good practice to test your batteries every time before you plan to take a series of pictures.

31. The best practical way to test the batteries is with the Fed-Flash tester (Fig. 18). This tester, which is supplied with the flash unit, is an adapter which makes it possible to insert a 2.3 volt lamp from a two-cell flashlight in the socket of the flash unit. The lamp itself is not supplied with the tester, but it is readily obtainable.

32. To use the tester, first attach the flash unit to the camera in the usual manner. Then screw the lamp into the tester as far as it will go (Fig. 19). Drop tester and lamp into the socket of the flash unit, with the projecting ends of the tester facing away from the reflector (see Fig. 20) and enter the lower projecting end of the tester into the bayonet slot. Then, with your thumb, press the other projecting end of the tester into its bayonet slot. Push the lamp down so that it makes contact with the bottom of the socket. Make sure that the lamp is upright, and in contact with the back of the socket.

33. Cover the camera lens with the palm of your hand to protect the film from being exposed when the shutter is opened, and push the shutter release plunger all the way down. The lamp will light at the instant when the shutter clicks, and will remain lighted as long as the plunger is held down.

34. If the lamp burns with a bright white light, the batteries are in good condition. If the lamp burns with a dull, red glow, the batteries have lost their strength, and should be replaced. If the lamp does not light at all, either the batteries are exhausted, or they have not been correctly installed in the battery case (see paragraph 21), or the lamp has not been pushed down all the way.

35. Another method of testing your batteries is to put them into a regular penlite type flashlight. If the flashlight is of the two cell type, both batteries can be tested together. If it is a one cell flashlight, each battery must be individually tested. In either case, remember that the lamp must burn with a bright, white light. If it gives only a dull, red glow, the batteries should be replaced.